

REMARKS/ARGUMENTS

The present amendments and remarks are in response to the final Office Action mailed February 22, 2005, in which claims 1 through 14 were rejected. Applicants have thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The amendments and following remarks are believed to be fully responsive to the Office Action and, are believed to render all claims at issue patentably distinguishable over the cited references.

Claims 1 and 7 are amended. No claims are deleted and no claims are added. Accordingly, claims 1 through 14 remain pending.

The limitations added in amended claims 1 and 7 are supported by the descriptions in, for example, page 6, lines 24-28 and page 7, lines 21-26 of the present specification as well as Fig. 1 and Fig. 4. No new matter is entered.

Applicant respectfully requests reconsideration in light of the following remarks.

CLAIM REJECTIONS - 35 USC §103(a)

1. Claims 1-3 and 5-13

With respect to Paragraph 1 of the Office Action, the Examiner rejected claims 1-3 and 5-13 under 35 USC §103(a) as being unpatentable over Tsai et al. (US Patent 6,252,184, "Tsai") in view of Lu et al. (US Patent 6,550,993, "Lu"). Claims 1 and 7 are independent claims.

Applicants respectfully traverse this rejection.

Applicants respectfully submit that neither Tsai nor Lu teach or suggest the features as claimed in amended claim 1. In particular, it is submitted that Tsai in view of Lu fail to show at least that the bottom plate and support plate are rivet together, and that no apertures are formed on the bottom plate such that if any liquid is accidentally poured into the keyboard, the mother board underneath the keyboard shall not be damaged.

As claimed in amended claim 1, the claimed waterproof keyboard is provided with a support plate having first apertures and a bottom plate having a

plurality of stamped nodes. The bottom plate is placed underneath the support plate. The stamped nodes of the bottom plate go through the first apertures of the support plate respectively. The bottom plate and the support plate are riveted together and no apertures are formed on the bottom plate. Hence, as any liquid is accidentally poured into the keyboard, the mother board underneath the keyboard shall not be damaged (Also see page 6, lines 24-28 of the present specification and Fig. 1, for example).

Applicants submit that Tsai does not disclose a bottom plate having a plurality of stamped nodes wherein the bottom plate is placed underneath a support plate, the stamped nodes of the bottom plate go through first apertures of the support plate respectively, such that the bottom plate and support plate are riveted. Therefore, Tsai fails to teach or suggest at least the characteristics that the bottom plate and support plate are riveted together and no apertures are formed on the bottom plate as claimed in amended claim 1.

Furthermore, Applicants submit that Lu merely discloses a keyboard including a lower plate 1, a membrane circuit 2 and an upper plate 3 (see col. 2, lines 21-23, 27-40, 63-67 and col. 3, lines 1-4 of its specification and its Figs. 2, 3A and 3B). The lower plate 1 has first latch sections 11, 11' and retain sections 12, 12'. The membrane circuit 12 has first apertures 21, 21', 22, 22' matching the first latch sections 11, 11' and retain sections 12, 12'. The upper plate 3 has second apertures 31, 31' corresponding to the first latch sections 11, 11' and second latch sections 32, 32' corresponding to the second apertures 31, 31'. There are openings 33, 33' in front of the second latch sections 32, 32' for housing the retain sections 12, 12'. During assembling the lower plate 1, membrane circuit 2 and the upper plate 3, dispose the first latch sections 11, 11' and retain sections 12, 12' through the first apertures 21, 21', 22, 22'. Then dispose the first latch sections 11, 11' through the second apertures 31, 31' of the upper plate 3, and the retain sections 12, 12' through the openings 33, 33' to match the second latch sections 32, 32'. See Fig. 3A and Fig. 3B, after assembling the lower plate 1, membrane circuit 2 and the upper plate 3, the

second apertures 31, 31', first aperture 21, 21' and the opening in front of the first latch sections 11, 11' of the lower plate 1 forms through holes passing through the upper plate 3, membrane circuit 2 and the lower plate 1.

In other words, apertures are formed on the lower plate 1 after assembling the keyboard of Lu. If any liquid is accidentally poured into the keyboard of Lu, the liquid will infiltrate the lower plate 1 of the keyboard and damage the mother board underneath the keyboard. Therefore, Lu fails to teach or suggest at least the characteristics that the bottom plate and support plate rivet together and no apertures are formed on the bottom plate as claimed in amended claim 1.

In view of the foregoing, Tsai and Lu fail to teach or suggest at least the characteristics that the bottom plate and support plate are rivet together and no apertures are formed on the bottom plate as claimed in amended claim 1, whether taken in combination or individually. In addition, there is no motivation taught in Lu and Tsai to provide a keyboard structure which can prevent any liquid accidentally poured into the keyboard from infiltrating the bottom plate of the keyboard so as to protect the mother board underneath the keyboard not to be damaged. Therefore, it would not be obvious for one skilled in the art to modify the inventions taught by Tsai and Lu to obtain the waterproof keyboard as claimed in amended claim 1. Therefore, Applicants respectfully submit that claim 1 is patentably distinguished over Tsai in view of Lu.

Claims 2, 3, 5 and 6 depend upon amended claim 1, each of which including all limitations of amended claim 1. Therefore, these claims are also patentably distinguished over Tsai in view of Lu.

Based on the above reasons, amended claim 7 and its dependent claims 8 through 13 are also patentably distinguished over Tsai and Lu.

Applicant respectfully requests that the Examiner's rejections under 35 USC §103(a) be reconsidered and withdrawn.

2. Claims 4 and 14

With respect to Paragraph 2 of the Office Action, the Examiner rejected

claims 4 and 14 under 35 USC §103(a) as being unpatentable over Tsai et al. (US Patent 6,252,184) in view of Lu et al. (US Patent 6,550,993) as applied to claims 1-3 and 5-13 above, and further in view of Demeo (US Patent 5,397,867).

Claim 4 depends upon amended claim 1, including all limitations of amended claim 1. Claim 14 depends upon claim 7, including all limitations of claim 7.

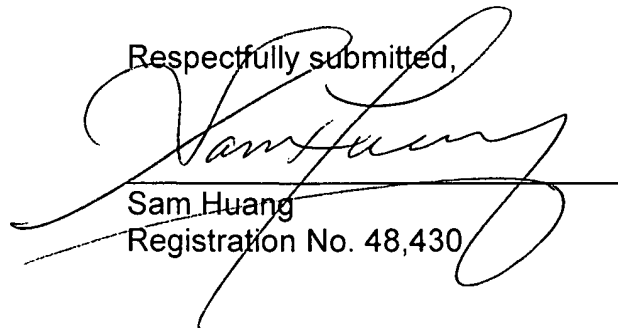
The examiner observes that Demeo teaches an illuminated keyboard that prints an opaque material (col. 4, lines 43-51) over a circuit board (22). Thus, none of Tsai, Lu and Demeo teaches or suggests the characteristic that the bottom plate and support plate rivet together and no apertures are formed on the bottom plate as claimed in claims 4 and 14.

Applicant respectfully requests that the Examiner's rejections under 35 USC §103(a) be reconsidered and withdrawn.

CONCLUSION

In view of the above, applicant respectfully submits that each of claims 1-14 recites subject matter that is neither disclosed nor suggested in the cited prior arts. Applicant also submits that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully requests that claims 1-14 be found allowable and that this application be passed to issue.

Respectfully submitted,



Sam Huang
Registration No. 48,430

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810